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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,902	07/26/2001	Ronald Paul Boisvert	DC4927	9462
7590	12/04/2003		EXAMINER	
			PENG, KUO LIANG	
			ART UNIT	PAPER NUMBER
			1712	
DATE MAILED: 12/04/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/915,902	BOISVERT ET AL.
	Examiner Kuo-Liang Peng	Art Unit 1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 1/13/03 IDS.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-5, 7 and 8 is/are rejected.

7) Claim(s) 6, 9 and 10 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3,4,5. 6) Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-10, drawn to a siloxane resin composition, classified in class 528, subclass 12+.
 - II. Claims 11-14, drawn to a method of forming an insoluble porous resin, classified in class 521, subclass 50+.
 - III. Claims 15-19, drawn to a method of forming an insoluble porous coating on a substrate, classified in class 427, subclass 387.
 - IV. Claim 20, drawn to a porous coating, classified in class 428, subclass 304+.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the process of Group II can be practiced with a siloxane resin derived from the hydrolysis-condensation of alkoxy silanes in the presence of a surfactant wherein the surfactant is subsequently removed at a sufficient high temperature to result in a mesoporous resin.

3. Inventions of Group I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the process of Group III can be practiced with a siloxane resin derived from the hydrolysis-condensation of alkoxysilanes in the presence of a surfactant wherein the surfactant is subsequently removed at a sufficient high temperature to result in a mesoporous resin.

4. Inventions of Group I and Group IV are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as an intermediate for making a non-porous material and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. Inventions of Group II and Groups III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of Group II and Group III have different modes of operation because Group II is a process for forming an insoluble porous resin, while Group III is directed to a method of forming a porous coating on a substrate and Group IV is directed to a porous coating.

6. Inventions of Group III and Group IV are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product of Group IV can be made by a materially different process such as one that heats the coated substrate for a time and temperature to effect curing and removal of the R²O groups from the cured coating composition.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

8. During a telephone conversation with Mr. Sharon Serervence on December 17, 2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-10.

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Affirmation of this election must be made by applicant in replying to this Office Action. Claims 11-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

10. Applicant is advised that should claim 9 be found allowable, claim 10 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-5 and 7-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5 and 7-8 of U.S. Patent No. 6 596 404. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: Claim 1 of U.S. Patent No. 6 596 404 obviously reads on Claims 1-2 of the present invention. For example, when 60 mole parts of component A) and 20 mole parts of component C) are used, the molar ratio of component A) to component C) is 3 to 1. The sum of component A) and component C) is 80 mole parts. Claim 2 of U.S. Patent No. 6 596 404 obviously reads Claim 3 of the present invention because R¹ can be methyl and R³ is a tertiary alkyl having 4 to 18 carbon atoms. Claim 3 of U.S. Patent No. 6 596 404 obviously reads on Claim 4 of the present invention because R³ is t-butyl. Claim 5 of U.S. Patent No. 6 596 404 obviously reads on Claim 5 of the present invention. For example, when 60 mole parts of component a) and 20 mole parts of component c) are used, the molar ratio of component a) to component c) is 3 to 1. Claim 7 of U.S. Patent No. 6 596 404 obviously reads Claim 7 of the present invention because R¹ can be methyl and R³ is a tertiary alkyl having 4 to 18 carbon atoms. Claim 8 of U.S. Patent No. 6 596 404 obviously reads on Claim 8 of the present invention because R³ is t-butyl.

Claim Objections

13. Claims 9-10 are objected to because of the following informalities:

In Claims 9-10 (line 2), should “(c)” be -- (b) --?

Appropriate correction is required.

14. Claims 1 and 5 would be allowable if rewritten or amended to overcome the double patenting rejection, set forth in this Office action.

Ito (JP 05-333553) discloses a siloxane coating containing t-butyloxy groups ([0012]-[0016]). However, it does not teach or fairly suggest the presence of T units (i.e., organotrialkoxysilane corresponding to Applicants' $R^1SiO_{3/2}$ units).

McLeod (US 3 730 743) discloses a siloxane coating containing isoproyloxy groups derived from tetraisoproyl orthosilicate (Example IV). However, it does not teach or fairly suggest the presence of T units (i.e., organotrialkoxysilane corresponding to Applicants' $R^1SiO_{3/2}$ units).

15. Claims 2-4 and 7-10 would be allowable if rewritten to overcome the double patenting rejection and/or claim objection, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The patentability of the instant claims is described in the previous paragraph.

16. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The patentability of the instant claims is described in paragraph 14.

17. The U.S. Patent Application Numbers cited in the information disclosure statements filed on September 19, 2001 and March 26, 2002 are lined through because they are not U.S. Patent documents. However, they are considered and included in the PTO-892 form.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (703) 306-5550. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson, can be reached on (703) 308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

klp
August 8, 2003



Kuo-Liang Peng
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